AMENDMENTS

In the claims:

Please substitute claims 1-54 presented below for claims 1-54 as previously presented.

The status of each claim is indicated. Currently amended claims are presented with additions double underlined and deletions in [brackets].

1. (Currently Amended) A method [for interfacing a user with a computer running an application program, the computer generating a graphical environment comprising a cursor and a graphical representation of at least a portion of a living body], [the method] comprising:

[providing an object in communication with the computer;]

[controlling the] updating data values associated with a cursor displayed in a graphical environment of a host computer [in relation to]based on manipulation of at least a portion of [the]an object coupled to the host computer[by the user]; and

outputting [a]haptic [sensation] feedback [to the user when the cursor interacts with a region within the graphical representation to provide the user with haptic feedback related to] associated with a simulated palpation of [the] a region within the graphical environment.

2. (Currently Amended) [A]The method [according to] of claim 1 wherein the host computer includes an application program [comprises]having a palpation training program[that tasks the user to perform a simulated palpation procedure].

3. (Currently Amended) [A]The method [according to] of claim 1, [wherein] the host computer including an application program including a palpation training program, the method comprising:

[comprises a palpation training program that tasks the user to locate] locating a predetermined target [and wherein the region is associated with the target] associated with the region in the graphical environment.

4. (Currently Amended) [A]The method [according to] of claim 3, further comprising: outputting a [wherein the] second haptic [sensation] feedback, [comprises]the second haptic feedback being a scaled version of the first haptic feedback[sensation].

5. (Currently Amended) [A]The method [according to] of claim 1, [wherein] the haptic [sensation] feedback [is] being a first haptic [sensation] feedback, [and]the method further comprising:

outputting a second haptic [sensation] feedback [when]associated with a position of the cursor [interacts with]in a second region [within the graphical representation]of the graphical environment.

6. (Currently Amended) [A]The method [according to] of claim 1, wherein the cursor [comprises]includes a graphical representation of at least a portion of [the] a hand[of the user].

7. (Currently Amended) [A]The method [according to] of claim 1, wherein the haptic [sensation] feedback simulates a pulse[of the living body].

8. (Currently Amended) [A]The method [according to] of claim 1, wherein the haptic [sensation] feedback is associated with [simulates] a simulated feature that is at least one of on the surface of the region within the graphical environment[or]and below the surface of the [graphical representation] region within the graphical environment.

9. (Currently Amended) [A]The method [according to]of claim 1, wherein the haptic [sensation] feedback [comprises]includes a vibration.

10. (Currently Amended) [A]The method [according to]of claim 1, wherein the haptic feedback[sensation [comprises]includes a spring force.

11. (Currently Amended) [A]The method [according to]of claim 1, wherein the object [comprises]includes a mouse.

12. (Currently Amended) [A]The method [according to]of claim 11, wherein the mouse includes an actuator coupled to a housing, the outputting the haptic feedback includes [comprising an actuator coupled to a housing of the mouse, the actuator operative to apply] outputting [an] the haptic feedback via the actuator[inertial force that is transmitted through the housing to the user].

13. (Currently Amended) [A]The method [according to]of claim 12, wherein the [inertial force is applied so as to]haptic feedback is configured to simulate[to the user the sensation of] a pulse[in the living body].

14. (Currently Amended) [A]The method[according to]of claim 11, [wherein] the mouse further comprising [comprises] a grounded linkage.

15. (Currently Amended) [A]The method[according to]of claim 14, [further comprising an actuator capable of causing the grounded linkage to apply] wherein the outputting the haptic feedback includes outputting the haptic[sensation] feedback via the grounded linkage[to the user].

16. (Currently Amended) A method [for interfacing a user with a computer running an application program, the computer generating a graphical environment comprising a cursor and a graphical representation of at least a portion of a living body, the], [method]comprising:

[providing an object in communication with the computer;]

[controlling the] updating data values associated with a cursor displayed in a graphical environment of a host computer [in relation to]based on manipulation of at least a portion of [the]an object coupled to the host computer[by the user]; and

outputting [a] haptic[sensation]feedback [to the user]based on a signal associated with an interaction of [when]the cursor [interacts] with [the]a graphical representation of a simulated being, the haptic feedback being a simulated pulse [to simulate a pulse]of [the living body]the simulated being.

17. (Currently Amended) [A]The method [according to]of claim 16, wherein the outputting the haptic feedback includes outputting the haptic feedback based on receiving instructions from the host computer [the application program comprises]the instructions including a pulse-taking training program[that tasks the user to] including an instruction to take the simulated pulse of [a] the simulated [patient]being.

18. (Currently Amended) [A]The method [according to]of claim 16, [wherein] the haptic [sensation]feedback [is] being a first haptic [sensation]feedback, the graphical representation of the simulated being having a first region and a second region, the signal being associated with the interaction of the cursor with the first region of the graphical representation,[output when the cursor interacts with a first region within the graphical representation; and], the method further comprising:

outputting a second haptic [sensation]feedback [when]based on a signal associated with an interaction of the cursor [interacts]with [a]the second region [within]of the graphical representation.

19. (Currently Amended) [A]The method [according to] of claim 18, wherein [the second haptic sensation comprises]the second haptic feedback is a scaled version of the first haptic feedback[sensation].

20. (Currently Amended) [A]The method [according to]of claim 16, wherein the cursor [comprises]includes a graphical representation of at least a portion of [the]a hand [of the user].

21. (Currently Amended) [A]The method [according to]of claim 16, wherein the haptic [sensation]feedback [comprises]includes a vibration.

22. (Currently Amended) [A]The method [according to]of claim 21, wherein the haptic [sensation]feedback [comprises]includes a substantially sinusoidal waveform.

23. (Currently Amended) [A]The method [according to]of claim 16, wherein the object [comprises]includes a mouse [and further comprising]having an actuator coupled to a housing[of the mouse], the outputting the haptic feedback includes outputting the haptic feedback via the actuator[operative to apply an inertial force that is transmitted through the housing to the user].

24. (Currently Amended) A method[for interfacing a user with a computer running an application program, the computer generating a graphical environment comprising a cursor and a graphical representation of at least a portion of a living body], [the method]comprising:

[providing an object in communication with the computer;]

[controlling the] updating data values associated with a cursor displayed in a graphical environment of a host computer [in relation to]based on manipulation of at least a portion of [the]an object coupled to the host computer[by the user]; and

outputting[a] haptic [sensation]feedback [to the user] based on interaction of [when] the cursor [interacts]with [the]a graphical representation within the graphical environment, the haptic feedback [to] simulating[e] a palpated feature that is one of on [or]and below the surface of the graphical representation.

25. (Currently Amended) [A]The method [according to]of claim 24, wherein the application program [comprises]includes a palpation training program[that tasks the user]including an instruction to perform a simulated palpation procedure.

26. (Currently Amended) [A]The method [according to]of claim 24, wherein the haptic [sensation]feedback [comprises]includes a spring force.

27. (Currently Amended) [A]The method [according to]of claim 24, wherein the object [comprises]includes a mouse.

28. (Currently Amended) [A]The method [according to]of claim 27, wherein the mouse [comprises]includes a grounded linkage.

29. (Currently Amended) [A]The method [according to]of claim 28, [further comprising]wherein the outputting the haptic feedback includes outputting the haptic feedback via [an actuator capable of causing]the grounded linkage[to apply the haptic sensation to the user].

30. (Currently Amended) [A]The method [according to]of claim 27, [wherein]the mouse [comprises]including at least one of a force detector[or]and pressure detector, the method further comprising detecting at least one of a force and a pressure.

31. (Currently Amended) [A]The method [according to]of claim 30, wherein the outputting the haptic feedback is associated with the detected at least one of the force and the pressure[the haptic sensation is output in relation a detected force or pressure].

32. (Currently Amended) [A]The method [according to]of claim 24, wherein [there is no visual indication of the feature] the simulated palpated feature is simulated as physically below the graphical representation.

33. (Currently Amended) [A]The method [according to]of claim 24, wherein the haptic [sensation]feedback simulates a three dimensional contour of the graphical representation.

34. (Currently Amended) [A]The method [according to]of claim 33, wherein the [mouse]object is substantially constrained to movement [substantially] in a geometric plane.

35. (Currently Amended) A [palpation]simulator, comprising:

[a computer readable medium comprising a computer readable program including program instructions to cause a palpation simulation to be executed on a computer, and to cause the computer to generate a cursor and a graphical representation of at least a portion of a living body;]

a[n] manipulatable object in communication with [the computer]a processor, the processor associated with a graphical representation of at least a portion of a simulated being[, at least a portion of the object being manipulatable by a user];

a sensor coupled to the manipulatable object and in communication with the [computer and coupled to the object to]processor, the sensor configured to detect a manipulation of [the at least a portion of] the manipulatable object to [control the]data values associated with a cursor in the graphical representation; and

an actuator coupled to the manipulatable object to output [a] haptic [sensation]feedback [to the user] based on interaction of [when]the cursor [interacts]with a region within the graphical representation, the haptic [sensation]feedback simulating a palpation of the [living body]simulated being.

36. (Currently Amended) [A palpation]The simulator [according to]of claim 35, further comprising a computer readable medium having instructions stored thereon to cause a palpation simulation to be executed on the processor, and to cause the processor to generate the cursor and the graphical representation of at least a portion of the simulated being, [wherein]the computer readable medium [is]being a [magnetic]disk or a [magnetic] tape.

37. (Currently Amended) [A palpation]The simulator [according to]of claim 35, further comprising a computer readable medium having instructions stored thereon to cause a palpation simulation to be executed on the processor, and to cause the processor to generate the cursor and the graphical representation of at least a portion of the simulated being, [wherein]the computer readable medium [is]being a portable storage device.

38. (Currently Amended) [A palpation]The simulator [according to]of claim 37, wherein the portable storage device is a compact disk (CD).

39. (Currently Amended) [A palpation]The simulator [according to]of claim 37, wherein the portable storage device is a digital video [or versatile]disk (DVD).

40. (Currently Amended) [A palpation]The simulator [according to]of claim 35, further comprising a computer readable medium having instructions stored thereon to cause a palpation simulation to be executed on the processor, and to cause the processor to generate the cursor and the graphical representation of at least a portion of the simulated being, [wherein]the computer readable medium [is]being memory in the computer.

41. (Currently Amended) [A palpation]The simulator [according to]of claim 35, further comprising a computer readable medium configured to store a computer readable program, [wherein]the computer readable program [is]being downloadable onto the computer readable medium over a [networked]network connection, the computer readable program having instructions to cause a palpation simulation to be executed on the processor, and to cause the processor to generate the cursor and the graphical representation of at least a portion of the simulated being.

42. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the manipulatable object [comprises]includes a housing of a mouse.

43. (Currently Amended) [A palpation]The simulator [according to]of claim 42, [wherein]the actuator [is]being coupled to the housing of the mouse, the actuator [operative]configured to [apply an inertial force]output the haptic feedback[that is transmitted through the housing to the user].

44. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the object [comprises]includes a mouse.

45. (Currently Amended) [A palpation]The simulator [according to]of claim 44, wherein the mouse [comprises]includes a grounded linkage.

46. (Currently Amended) [A palpation]The simulator [according to]of claim 45, [wherein]the actuator [is]being configured to cause [capable of causing] the grounded linkage to output the haptic feedback[apply the haptic sensation to the user].

47. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the cursor [comprises]includes a graphical representation of at least a portion of a[the] hand[of the user].

48. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the haptic [sensation]feedback simulates a pulse of the [living body]simulated being.

49. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the haptic [sensation]feedback simulates a feature that is at least one of on the surface of the graphical representation and[or] below the surface of the graphical representation.

50. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the haptic [sensation]feedback [comprises]includes[a] vibration.

51. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the haptic [sensation]feedback [comprises]includes a spring force.

52. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the object [comprises]includes at least one [or more finger]receiving [portions]portion configured to output the haptic feedback[so that the haptic sensation may be delivered to one or more fingers of the user].

53. (Currently Amended) [A palpation]The simulator [according to]of claim 35, wherein the sensor [comprises]includes a position sensor.

54. (Currently Amended) [A palpation]The simulator [according to]of [53]claim 35, wherein the sensor [comprises]includes a force sensor.